



## FutureGen Industrial Alliance

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The FutureGen Alliance, an organization of leading international energy companies, was formed to partner with the Department of Energy (DOE) on the FutureGen project. The active role of industry in this project ensures that the public and private sector share the cost and risk of developing the technologies necessary to commercialize the FutureGen concept. The FutureGen Alliance members are dedicating nearly \$400 million toward the project's costs and bring valuable technical expertise and power plant engineering and construction experience to the project. Alliance members include:

- American Electric Power Service Corporation (Columbus, OH)
- Anglo American Services (UK) Limited (London, England)
- BHP Billiton Energy Coal, Inc. (Melbourne, Australia)
- China Huaneng Group (Beijing, China)
- CONSOL Energy, Inc. (Pittsburgh, PA)
- E.ON U.S., LLC (Louisville, KY)
- Foundation Coal Corporation (Linthicum Heights, MD)
- Peabody Energy Corporation (St. Louis, MO)
- PPL Energy Services Group, LLC (Allentown, PA)
- Rio Tinto Energy America Services (Gillette, WY)
- Southern Company Services, Inc. (Atlanta, GA)
- Xstrata Coal Pty Limited (Sydney, Australia)

As a partner with DOE, the FutureGen Alliance will choose a host site and design, construct and operate the FutureGen plant. For more information on the Alliance and site selection process, go to: [www.FutureGenAlliance.org](http://www.FutureGenAlliance.org).

**American Electric Power Service Corporation** owns and operates more than 36,000 megawatts of generating capacity in the United States. It is the largest electricity generator in the United States. At its Mountaineer Plant, AEP currently hosts DOE's largest U.S.-based geologic sequestration project related to deep saline formations. The geologic characterization and carbon dioxide injection well design and permit preparation expertise gained in the Mountaineer project will be directly applicable to FutureGen. ([www.aep.com](http://www.aep.com))

**Anglo American Services (UK)** Limited is one of the world's largest mining and natural resource groups. With its subsidiaries, joint ventures and associates, it is a global leader in platinum group metals, gold and diamonds, with significant interests in coal, base and ferrous metals, industrial minerals and paper and packaging. The group is geographically diverse, with operations in Africa, Europe, South and North America, Australia and Asia. ([www.angloamerican.co.uk/](http://www.angloamerican.co.uk/))



**BHP Billiton Energy Coal, Inc.** is the world's largest diversified resources company, and is an industry leader in major commodity businesses including, aluminum, energy coal and metallurgical coal, copper, ferro alloys, nickel, iron ore, uranium, nickel and titanium and minerals. BHP provides steaming coal for use in the electric power generation industry and general industrial concerns such as cement production. The company's operations produce a variety of coal (e.g. low-sulphur, high-volatile South African coal and bituminous and sub-bituminous Indonesian coal) that can provide product solutions for most applications. ([www.bhpbilliton.com](http://www.bhpbilliton.com))

**China Huaneng Group** is one of the top 10 power companies in the world and is the largest coal-based power generator in the People's Republic of China, representing about 9 percent of China's generating capacity. The Huaneng Group's involvement in FutureGen signals an exciting step forward in international cooperation to meet long-term global energy challenges, promote a cleaner environment, and create solutions to address concerns about climate change. China has the world's third-largest coal reserve base and uses coal to generate about 70 percent of its electricity. ([www.chng.com.cn/english/index.htm](http://www.chng.com.cn/english/index.htm))

**CONSOL Energy, Inc.** is the largest producer of high-Btu bituminous coal in the United States, the largest exporter of U.S. coal, and one of the largest U.S. producers of coal bed methane. CONSOL also operates one of the largest private coal research organizations in the United States. Under a grant from DOE, CONSOL is conducting a \$9 million investigation of sequestering carbon dioxide in coal seams. Coal seams are a possible formation for FutureGen sequestration, making CONSOL's technical experience highly relevant to the project. ([www.consolenergy.com](http://www.consolenergy.com))

**E.ON U.S., LLC**, headquartered in Louisville, Ky., is a subsidiary of E.ON A.G., the world's largest investor-owned energy services provider. E.ON U.S. is a diversified energy services company that owns and operates Louisville Gas and Electric Company, a regulated utility that serves 321,000 natural gas and 394,000 electric customers in Louisville and 16 surrounding counties, and Kentucky Utilities Company, a regulated electric utility in Lexington, Ky., that serves 525,000 customers in 77 Kentucky counties and five counties in Virginia. ([www.eon-us.com](http://www.eon-us.com))

**Foundation Coal Corporation** is one of the 5 largest U.S. coal producers with 13 surface and underground mines located in 6 eastern, midwestern, and western states. To the FutureGen effort, Foundation Coal brings a technical understanding of a diversity of coals and strong relationships in the international community. ([www.foundationcoal.com](http://www.foundationcoal.com))

**Peabody Energy Corporation** is the world's largest private-sector coal company, with 2002 sales of 198 million tons of coal and \$2.7 billion in revenues. Its coal products fuel more than 9 percent of all U.S. electricity generation and more than 2 percent of worldwide electricity generation. With diverse national and international coal and energy operations, Peabody brings a robust business perspective to FutureGen. ([www.peabodyenergy.com](http://www.peabodyenergy.com))

**PPL Energy Services Group, LLC** controls about 11,500 megawatts of generating capacity in the United States, sells energy in key U.S. markets and delivers electricity to more than 5 million customers in Pennsylvania, the United Kingdom and Latin America. ([www.pplweb.com](http://www.pplweb.com))

**Rio Tinto Energy America (RTEA) Services** is among the safest and most efficient energy producers in the world. Headquartered in Gillette, Wyoming, RTEA provides the fuel for approximately six percent of the nation's electricity through five coal mines it operates in the Western United States. RTEA is affiliated with the Rio Tinto Group of companies, which makes it part of one of the world's leading consortiums in finding, extracting and processing mineral resources. RTEA believes in reliable and affordable energy, and in balancing economic growth and environmental protection. Through the Rio Tinto group, RTEA brings strong international connections to Australia and the United Kingdom, including Australian clean coal and sequestration research and development projects such as the Australian CRC for Coal in Sustainable Development. RTEA will be a significant conduit to exchanging technical information between FutureGen and Australian technical experts. ([www.rtea.com](http://www.rtea.com))

## FutureGen Industrial Alliance (continued)

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**Southern Company Services, Inc.**, with 4 million customers and nearly 40,000 megawatts of generating capacity (over 22,000 megawatts of which is coal-based), is the premier super-regional energy company in the Southeast and a leading U.S. producer of electricity. In addition to management functions required for day-to-day plant operation, Southern Company maintains a large in-house Engineering and Construction Services organization that handles engineering, procurement, and construction activities for both new and existing power plants. In Wilsonville, Alabama, Southern Company hosts the Power Systems Development Facility (PSDF), which is the nation's premier facility for testing innovative coal-based power generation and pollution control systems. The operation of PSDF is co-sponsored by the U.S. Department of Energy Office of Fossil Energy/National Energy Technology Laboratory; Southern Company; EPRI; Kellogg, Brown and Root; Peabody Energy; and Siemens Westinghouse Power Corporation. PSDF offers a potential site for pilot testing technologies prior to their incorporation into the FutureGen facility. ([www.southerncompany.com](http://www.southerncompany.com))

**Xstrata Coal Pty Limited** is the world's largest exporter of thermal coal and the fifth largest producer of hard coking coal, producing both premium quality hard coking coal and semi-soft coal. Headquartered in Sydney, Australia, Xstrata Coal Pty Limited has interests in over 30 operating coal mines throughout Australia, South Africa and Colombia. Thermal coal is used in power generation, while coking coal is used mainly in the production of steel and other industrial applications. Xstrata Coal Pty Limited is the second largest of the commodity businesses within Xstrata plc, a major global diversified mining group, listed on the London and Swiss stock exchanges with around 40,000 employees worldwide. ([www.xstrata.com](http://www.xstrata.com))

## Program Contact

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